BIRDS OF EASTERN McKENZIE COUNTY, NORTH DAKOTA

BY ADRIAN LARSON

The area covered by this paper lies in the western part of North Dakota. McKenzie County is bounded on the west by Montana, on the north and east by the Missouri River, and on the south, so far as this paper is concerned, by the Little Missouri River. This county, called the "Inland Empire," has about the same area as some of the eastern states; only the northeastern portion of it, about twenty townships (some seven hundred square miles), is covered by this paper.

The region treated is known as the Missouri Plateau, and has an elevation of about 2,300 feet—a little higher on the buttes, and a little lower along the Missouri River. It lies in the Transition Zone. and becomes hot enough at times to be properly classed as the arid Upper Sonoran Zone. Maximum summer temperature has reached $106^{\circ}F$., and in the winter season it has gone as low as 48° below zero. The prevailing winds are southeast and northwest, and the average rainfall is around 14 inches.

There is a great variation in the topography of this region. The most conspicuous topographic feature is the so-called "badlands." Along the Missouri River, and extending for two or three miles inland, the surface is cut up into innumerable gullies, canyons, coulees, washouts, and steep cliffs that beggar description; words can not describe these badlands adequately. Lignite coal seams that have burned, and are still burning, have caused much of the bizarre appearance of this country. Loose, easily eroded soil and torrential rains during the summer have also been factors in the making of the badlands.

When one is in the heart of the badlands, and looking north, the hills and valleys have a cheerless, treeless, and barren appearance. On the other hand, by looking in the opposite direction one will find that the badlands are very well covered with vegetation. Burr oak, gray and black birch, aspens, green ash, elm, juneberry, wild plum, choke cherry, pin cherry, silver berry, buffalo berry, black and red haw, various willows, red cedar, creeping juniper, and bearberry are found in profusion. Along the larger washes will be found cotton-woods, sage brush, buck brush, prickly pear and other forms of cactus. Spanish bayonet, rose bushes, gumbo lilies, climbing bittersweet, wild hops, gooseberry, currant, wild red raspberry, hazel brush—all of these and others will be found in the shadier portions of the badlands.

There may also be found rattlesnakes, bull snakes, blue racers, chipmunks, porcupines, bobcats, white-tailed deer, and formerly the

mountain lion, buffalo, and elk. Onc of the most conspicuous of the animals is the coyote. Timber wolves used to be found, but they have all been exterminated. The last wild buffalo was shot in 1901, and the elk some years earlier. It is reported that a few antelope are still in this country, but I have seen none myself. The mountain lion is extinct; the beaver was nearly extinct, but is again becoming numerous owing to a closed season.

The eastern bird student will probably be astonished at the number of western birds to be found here. The Rock Wren will be seen bobbing in and out of the crevices and among the rocks. The all-blue Mountain Bluebird is conspicuous. The Say's Phoebe, the Blackheaded Grosbeak, and the Prairie Falcon will also be found.

The badlands are found along the Missouri River, but the big badlands are those of the Little Missouri River. These badlands begin near the northern boundary of South Dakota and follow the course of the Little Missouri northward to its junction with the Missouri, in some places reaching a considerable width. For some years a movement has been growing to have a large area of these badlands converted into a national park, to be known as Roosevelt National Park, because Roosevelt spent his cowboy life here.

Another ecological area is the timber growth along the flood plain of the Missouri River, which reaches a width of half a mile in places. The timber is chiefly cottonwood, with a mixture of ash and elm at higher elevations, and various small shrubbery. The fauna which occurs here is closely similar to that of the badlands; but in places where the trees have been cleared away the fauna will be more like that of the plains.

The plains form a distinct life area characterized chiefly by the grasses, such as the buffalo, grama, and blue-joint grasses. The wild rose, buck brush, and silverberry are to be found in the coulees and depressions. This area includes, of course, all of the farm lands. This country has been homesteaded and farmed more or less since 1903, and, as it is a land of fair crops, many of the first homesteaders are still living on their original filings. Many artificial groves of trees are scattered over the prairies, and on the whole it is more than likely that there are more birds here now than there were prior to 1903.

There remains for mention the lake and slough area. The region contains one large slough known as Dimick Lake, which is a great resort for waterfowl. There are also a few smaller sloughs scattered about, which play a part in the ecology of the region. Since this

region was on the edge of the Kansas ice sheet, it is well drained with the exception of the few sloughs mentioned.

My studies in this region began in September, 1912, and continued until April, 1914; then I was away until August, 1916, with the exception of a week in May, 1915. Then I resumed my studies in 1916, and continued them until April, 1926. I have had, therefore, twelve years in this region, including eleven summers and thirteen winters. J. J. Audubon traversed part of this region in 1844, and, doubtless some of the other early ornithologists touched the edge of it in passing up or down the Missouri River. We may believe that there has not been much change in the species of birds since those early years, even though certain species may have changed in status. As remarked above some birds, especially the woodland birds, have probably increased in abundance. It may be a possibility that the Passenger Pigeon, the Whooping Crane, the Trumpeter Swan, or the Wild Turkey have lived here in the past, but I have never heard any of the old settlers speak of them, and I can only leave them out of consideration.

[The following list contains 184 named forms.—Ed.]

EARED GREBE. Colymbus nigricollis californicus. A common summer resident and breeder in the sloughs. Average spring arrival May 14 (six years). Earliest spring arrival, May 6, 1923. Average fall departure, September 18 (two years).

PIED-BILLED GREBE. *Podilymbus podiceps*. A common summer resident and breeder. Earliest date of spring arrival, April 30, 1919. Average fall departure, September 19 (three years).

Pacific Loon. Gavia pacifica. On October 19, 1924, a bird was shot on the Missouri River which I considered was of this species. Color pattern, measurements, etc., tallied exactly with the description given in Bailey's "Handbook of Birds of Western United States." The skin was sent to the U. S. Biological Survey for determination, but I never again heard of it.

RING-BILLED GULL. Larus delawarensis. Rare. Two were seen on November 8, 1925.

Franklin's Gull. Larus franklini. A common transient visitant. Average spring arrival, May 1 (five years). Earliest spring arrival, April 29, 1924. Latest spring departure, June 8, 1924. During the spring migration huge flocks will often settle on newly ploughed fields and feed.

Forster's Tern. Sterna forsteri. Not common. Two were seen along the Missouri River, June 12, 1925.

BLACK TERN. Clidonias nigra surinamensis. A common summer resident. Average spring arrival, May 20 (eight years). Earliest spring arrival, May 11, 1921. Average fall departure, July 30 (two years). The data on the departure of this species are unsatisfactory.

Double-Crested Cormorant. *Phalacrocorax auritus*. Rare. A cripple of this species was caught at Watford City sometime during 1915. In 1920 I saw a mounted cormorant there which may have been the same individual.

WHITE PELICAN. Pelecanus erythrorhynchos. Not very common. Twenty-eight in a flock were observed on September 26, 1925.

HOODED MERGANSER. Lophodytes cucullatus. Rare. One was shot on October 29, 1916. The lack of fish-inhabited lakes probably accounts for the scarcity of diving birds and mergansers.

Mallard. Anas platyrhynchos. A very common transient; a few remain to breed. Both the Mallard and the Pintail lay their eggs in a grassy field or meadow often a mile or more from the nearest water. I have twice found nests of the Mallard at the base of a diamond willow tree in a deep oak and aspen covered coulee. One nest contained twelve eggs, which were later destroyed by crows; the same duck built another nest, which contained eggs when found. Average spring arrival, March 28 (nine years). Earliest spring arrival, March 17, 1926. Average fall departure, November 11 (six years). Latest fall/departure, December 10, 1923. In some years of light snowfall a few Mallards have lingered throughout the winter at the air-holes in the Missouri River, feeding in nearby corn and stubble fields.

Gadwall. Chaulelasmus streperus. A common transient, a few remaining to nest. Earliest spring arrival, April 21, 1921. Average fall departure, November 9 (three years). Latest date of fall departure, November 19, 1923.

BALDPATE. Mareca americana. A common transient, a few remaining to nest. Both the Gadwall and the Baldpate linger in the fall until the last pond hole is frozen. Average spring arrival, April 6 (five years). Earliest spring arrival, March 17, 1926. Average fall departure, November 3 (two years). Latest fall departure, November 5, 1924.

GREEN-WINGED TEAL. Nettion carolinense. A common transient, a few remaining to nest. Average spring arrival, April 12 (four years). Earliest spring arrival, April 5, 1921. Average fall departure, October 31 (four years). Latest fall departure, November 9, 1924.

BLUE-WINGED TEAL. Querquedula discors. A common summer resident, nesting abundantly. Average spring arrival, April 29 (six

years). Earliest spring arrival, April 25, 1925. Average fall departure, October 15 (five years). Latest fall departure, November 9, 1924 (probably a cripple).

SHOVELLER. Spatula clypeata. A common summer resident and breeder. Average spring arrival, April 14 (seven years). Earliest spring arrival, March 24, 1918. Average fall departure, October 31 (four years). Latest fall departure, November 14, 1923.

REDHEAD. Marila americana. A tolerably common transient. average spring arrival, April 17 (three years). Earliest spring arrival, April 12, 1924. Average fall departure, October 27 (three years). Latest fall departure. November 9, 1924.

Canvas-Back. *Marila valisineria*. A rare transient. Latest fall departure, November 9, 1924, a red-letter day for ducks.

Scaup Duck. *Marila marila*. A tolerably common transient. Latest fall departure, November 9, 1924.

Lesser Scaup Duck. *Marila affinis*. A common transient, a few remaining on the large sloughs throughout the summer. Average spring arrival, April 17 (six years). Earliest spring arrival, March 31, 1925. Average fall departure, November 9 (three years). Latest fall departure, November 19, 1923.

RING-NECKED DUCK. Marila collaris. The status is about the same as the Scaup. Latest fall departure, October 26, 1924.

Buffle-Head. Charitonetta albeola. A tolerably common transient. Earliest spring arrival, April 29, 1923. Average fall departure. November 6 (three years). Latest fall departure, November 14, 1923.

Ruddy Duck. *Erismatura jamaicensis*. A common transient; a few may nest. Average spring arrival, May 20 (two years). Average fall departure, October 23 (two years).

Lesser Snow Goose. Chen hyperboreus. Rare. April 23, 1918, only record.

WHITE-FRONTED GOOSE. Anser albifrons gambeli. Rare. June 1, 1925, only record.

Canada Goose. Branta canadensis. A regular, but not common, transient. Average spring arrival, March 24 (ten years). Earliest spring arrival, March 9, 1926. Average spring departure, April 5 (six years). Latest spring departure, April 8, 1920. Average fall arrival, October 26 (three years). Earliest fall arrival, October 18, 1924. Average fall departure, November 15 (five years). Latest fall departure, November 17, 1918.

WHISTLING SWAN. Cygnus columbianus. Rare. The species was seen on the following dates: April 6. 1921; April 22-27, 1923; November 14, 1923; on this last date five were seen.

BITTERN. Botaurus lentiginosus. A common summer resident in the marshes and meadows, breeding. Average spring arrival, May 22 (four years). Earliest spring arrival, May 14, 1920. Average fall departure, October 7 (six years). Latest fall departure, October 21, 1924.

Great Blue Heron. Ardea herodias. A common summer resident along the Missouri River, breeding. Average spring arrival, April 16 (three years).

SANDHILL CRANE. Grus mexicana. A common transient in both spring and fall. Average spring arrival, April 9 (eight years). Earliest spring arrival, April 3, 1921. Average spring departure, April 17 (three years). Latest spring departure, April 30, 1920. Average fall arrival, September 28 (eight years). Earliest fall arrival, September 14, 1919. Average fall departure, October 10 (seven years). Latest fall departure, November 5, 1924.

Sora. Porzana carolina. A common summer resident in the marshes, breeding. Average spring arrival. May 27 (three years). Average fall departure, September 30 (four years). Latest fall departure, October 18, 1925. An imitation of their call will often cause a racket of answering rail calls throughout the marsh.

COOT. Fulica americana. A common summer resident of the marshes, breeding. Average spring arrival, May 8 (four years). Earliest spring arrival, May 4. 1924. Average fall departure, October 28 (four years). Latest fall departure. November 9, 1924 (a cripple).

NORTHERN PHALAROPE. Lobipes lobatus. Transient, not quite as common as Wilson's Phalarope. May 20-25, 1924.

WILSON'S PHALAROPE. Steganopus tricolor. A tolerably common summer resident, breeding. Average spring arrival, May 11 (eight years). Earliest spring arrival. May 4, 1918. I have no fall records.

AVOCET. Recurvirostra americana. Rare. I have seen it here only once, June 7, 1925. The scarcity of this species is probably explained by the absence of alkaline lakes and ponds.

WILSON'S SNIPE. Gallinago delicata. A common transient. Average spring arrival, May 2 (three years). Earliest spring arrival, April 27, 1921. Average fall departure. October 18 (ninc years). Latest fall departure, November 14, 1923.

Long-billed Dowitcher. Lymnodromus griseus griseus. An uncommon transient. Scptember 16-21, 1924. Pectoral Sandpiper. *Pisobia maculata*. A common transient. Average spring arrival, April 28 (three years). Latest spring departure, May 6, 1923. Earliest fall arrival, July 20, 1924. Latest fall departure, September 24, 1912.

WHITE-RUMPED SANDPIPER. Pisobia fusciollis. An uncommon transient. May 20 to June 1, 1924.

BAIRD'S SANDPIPER. *Pisobia bairdi*. An uncommon transient. May 4, 1921. September 21, 1924.

LEAST SANDPIPER. *Pisobia minutilla*. A common transient. Average spring arrival, May 18 (three years). Latest spring departure, June 1, 1924.

SEMIPALMATED SANDPIPER. Ereunetes pusillus. A common transient, which is easily confused with the preceding. Average spring arrival, May 18.

MARBLED GODWIT. Limosa fedoa. Rare. A flock of eight was seen May 27, 1925.

Hudsonian Godwit. Limosa haemastica. Rare. One was recorded on May 22, 1924.

Greater Yellow-legs. *Totanus melanoleucus*. An uncommon transient. Latest spring departure, May 22, 1924.

Yellow-legs. Totanus flavipes. A common transient. Average spring arrival, April 24 (six years). Earliest spring arrival, April 17, 1925. Average spring departure, May 10 (two years). Latest fall departure, October 15, 1925.

Western Solitary Sandpiper. Tringa solitaria cinnamomea. A tolerably common transient. Average spring arrival, May 3 (three years). Earliest spring arrival, April 27, 1924. Latest spring departure, May 31, 1925. Earliest fall arrival, July 17 (two years). Latest fall departure, September 18, 1920.

Western Willett. Catoptrophorus semipalmatus inornatus. An uncommon summer resident, possiblly breeding. Average spring arrival, May 13 (four years). Earliest spring arrival, May 1, 1924.

UPLAND PLOVER. Bartramia longicauda. A tolerably common summer resident, breeding. Average spring arrival, May 10 (eight years). Earliest spring arrival, May 6, 1921. Latest spring arrival, May 15, 1917. Only fall date, August 24, 1924.

Spotted Sandpiper. Actitis macularia. A common summer resident, breeding; especially along the Missouri River. Average spring arrival arrival, May 21 (four years). Earliest spring arrival, May 15, 1917. Latest fall date, September 7, 1919.

Long-billed Curlew. *Numenius americanus*. An uncommon transient. Average spring arrival, April 24 (six years). Average spring departure, May 15 (two years).

AMERICAN BLACK-BELLIED PLOVER. Squatarolla s. cynosurae. A rare transient. May 18-22, 1924.

GOLDEN PLOVER. Pluvialis d. dominica. A rare transient. May 27, 1925; also seen in September, 1925.

KILLDEER. Oxyechus vociferus. A common summer resident, breeding. Average spring arrival, April 5 (ten years). Earliest spring arrival, March 28, 1918. Average fall departure. October 11 (four years). Latest fall departure, October 18, 1925.

Semipalmated Plover. Charadrius semipalmatus. Uncommon. A small flock was seen on Dimick Lake on August 20, 1925.

Belted Piping Plover. Charadrius melodus. Uncommon. A straggler may be seen now and then on the sandbars in the Missouri River. June 12 and August 28, 1925, are my only dates.

RING-NECKED PHEASANT. *Phasianus torquatus*. The introduction is apparently successful, as they are becoming common along the Missouri River, where they frequent the timber and brush.

HUNGARIAN PARTRIDGE. *Perdix perdix*. I found two in an arroyo near the Missouri River on May 31, 1925. Several pairs have been liberated a year or two previously.

PINNATED GROUSE. Prairie Chicken. Tympanuchus americanus. A resident, though not very common in winter; it breeds more or less commonly in the neighborhood of the prairie marshes.

Prairie Sharp-tailed Grouse. Pedioecetes phasianellus campestris. A common resident, which nests abundantly. This is our common prairie chicken.

Western Mourning Dove. Zenaidura macroura marginella. A common summer resident, breeding. Average spring arrival, April 23 (six years). Earliest spring arrival, April 18, 1920. Average fall departure, September 28 (six years). Latest fall departure, October 15, 1923.

[Turkey Vulture. Cathartes aura. This species has been reported along the Missouri River; a friend has told that he has seen a half dozen of these birds roosting in the tall cottonwoods along that stream. I have never seen them there].

Marsh Hawk. Circus hudsonius. A common summer resident, breeding. Average spring arrival, March 21 (eleven years). Earliest spring arrival, March 12, 1913. Average fall departure, October 18 (six years). Latest fall departure. October 30, 1925.

SHARP-SHINNED HAWK. Accipiter velox. A tolerably common summer resident, breeding. Earliest spring arrival, May 6, 1925. Average fall departure, October 11 (two years).

COOPER'S HAWK. Accipiter cooperi. Uncommon. Breeds (?). Earliest spring arrival, May 8, 1925. Only fall record, September 25, 1924.

Goshawk. Astur atricapillus. A more or less common winter visitor. During October and November, 1916, it was very abundant and destructive to game birds and poultry. Average spring departure. March 15 (four years). Latest spring departure, April 2, 1917.

WESTERN RED-TAIL. Buteo borealis calurus. Not common; may breed. Average spring arrival, March 29 (three years). Average fall departure, October 19 (two years).

SWAINSON'S HAWK. *Buteo swainsoni*. A common summer resident, nesting in the cottonwoods or other tall trees, or on the cliffs in the badlands. Average spring arrival, April 24 (three years). Latest fall departure, October 19, 1924.

ROUGH-LEGGED HAWK. Archibuteo lagopus sancti-johannis. An uncommon winter visitor. Average fall arrival, October 31 (three years). Earliest fall arrival, October 23, 1924. Average spring departure, March 19 (five years). Latest spring departure, April 1, 1913. I had one of these birds in captivity for a week, and it would eat anything offered it. One day it pounced on a stuffed grouse, and hung on for dear life.

Ferruginous Rough-leg. Archibuteo ferrugineus. Not common; nests on the cliffs in the badlands. Earliest spring arrival, March 25, 1920. Latest fall departure, October 19, 1924.

GOLDEN EAGLE. Aquila chrysaetos. Rare; though in the vicinity of the badlands it may be found at any season of the year.

Bald Eagle. Haliaetus leucocephalus. Rare; usually to be found during the fall and winter. Formerly both eagles nested commonly.

PRAIRIE FALCON. Falco mexicanus. A common summer resident in the badlands.

Duck Hawk. Falco peregrinus anatum. Rare. One was caught in a trap on December 2, 1925.

RICHARDSON'S MERLIN. Falco columbarius richardsoni. Rare. Only record, September 5, 1924.

Sparrow Hawk. Cerchneis sparveria sparveria. A common summer resident, breeding. Average spring arrival, March 31 (nine years). Earliest spring arrival. March 14, 1918. Average fall departure, October 20 (two years).

Long-eared Owl. Asio wilsonianus. Tolerably common, breeding. Short-eared Owl. Asio flammeus. Tolerably common, breeding. Apparently more common in winter.

Western Horned Owl. Bubo virginianus occidentalis. A common resident, breeding.

Snowy Owl. Nyctea nyctea. An irregular winter visitor. Earliest fall arrival, November 19, 1918. Latest spring departure, March 29, 1925.

Burrowing Owl. Spectyto cunicularia hypogaea. More abundant in the prairie dog towns than anywhere else.

BLACK-BILLED CUCKOO. Coccyzus erythrophthalmus. A tolerably common summer resident, breeding. Average spring arrival, June 9 (three years). Latest fall date, August 8, 1920.

Belted Kingfisher. Ceryle alcyon alcyon. A common summer resident along the Missouri River, breeding. Average spring arrival, April 10 (two years).

NORTHERN HAIRY WOODPECKER. Dryobates villosus leucomelas. A tolerably common resident, breeding. A specimen submitted to Dr. H. C. Oberholser January 30, 1921, was pronounced septentrionalis [=leucomelas].

DOWNY WOODPECKER. Dryobates pubescens medianus. A common resident, breeding.

YELLOW-BELLIED SAPSUCKER. Sphyrapicus varius varius. Rare. The only one I have ever seen here was found in an aspen grove on May 2, 1918.

RED-HEADED WOODPECKER. Melanerpes erythrocephalus. Not at all common. I have seen it on two dates, viz.. June 18, 1921, and June 10, 1924.

Northern Flicker. Colaptes auratus luteus.

RED-SHAFTED FLICKER. Colaptes cafer collaris. Flickers are very common summer residents, and breed. Collaris is occasionally seen, but many appear to be that are in reality hybrids. Average spring arrival, April 10 (ten years). Earliest spring arrival, March 31, 1925. Average fall departure. October 3 (three years). Latest fall departure, October 7, 1921.

POOR-WILL. Phalaenoptilus nuttalli nuttalli. Rare. One was seen on September 5, 1919, in the badlands of the big Missouri.

Sennett's Nighthawk. Chordeiles virginianus sennetti. A common summer resident. Average spring arrival, May 31 (four years). Earliest spring arrival, May 26. 1913. Average fall departure, September 9 (six years). Latest fall departure, September 22, 1918.

[To be continued].